Long Branch Lake

Region - Glacial Plains

Long Branch is a large lake (2,435 acres) located in Macon County. Grassland/pasture, crop land, and forest make up 37%, 34% and 22% of the watershed respectively. The lake is an important recreational resource and a drinking water reservoir.

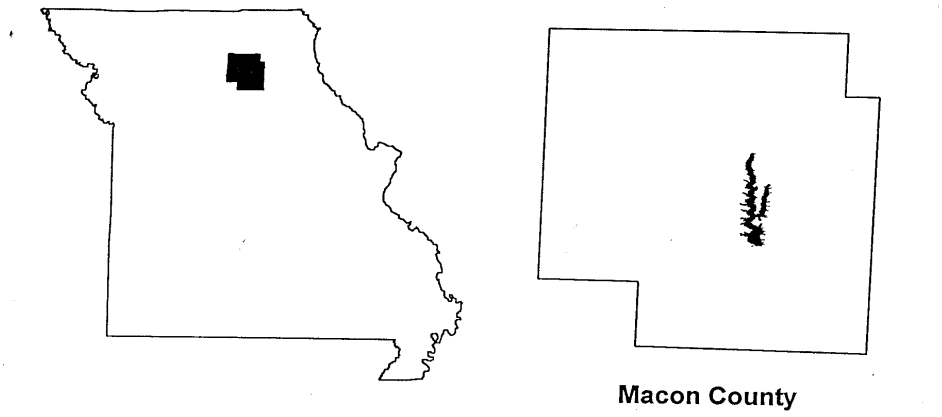

Figure 34. Location of Long Branch Lake.

2000 Results

Figure 35 shows how the parameters phosphorus, nitrogen, algal chlorophyll, inorganic suspended solids, and Secchi transparency varied in Long Branch Lake during the 2000 sampling season. A brief description of these results are:

- Six samples were collected, the first sample on 5-31 and the last sample on 10-4.
- No high peaks were recorded in the nutrient values, as have been recorded in the past two years of sampling.
- Phosphorus and chlorophyll values follow similar patterns.
- This is the third year that Long Branch has been in the program. In comparing the geometric means (see page 18 for further explanation of geometric means) for the parameters measured in the three years, there seems to be a possible trend in decrease in nitrogen and phosphorus, but future sampling will be necessary to determine if this is a trend or normal annual fluctuations.
- Average phosphorus, nitrogen and chlorophyll values were in the eutrophic range.

Table 17. Descriptive statistics for Long Branch Lake - 2000.

Parameters	Average	Median	Minimum	Maximum
Chlorophyll (μg/L)	13.9	11.4	6.4	27.0
Nitrogen (μg/L)	702	695	610	770
Phosphorus (μg/L)	41	41	35	50
ISS (mg/L)	6.6	6.4	1.6	9.8
Secchi (inches)	27	27	22	34

ISS = Inorganic Suspended Solids

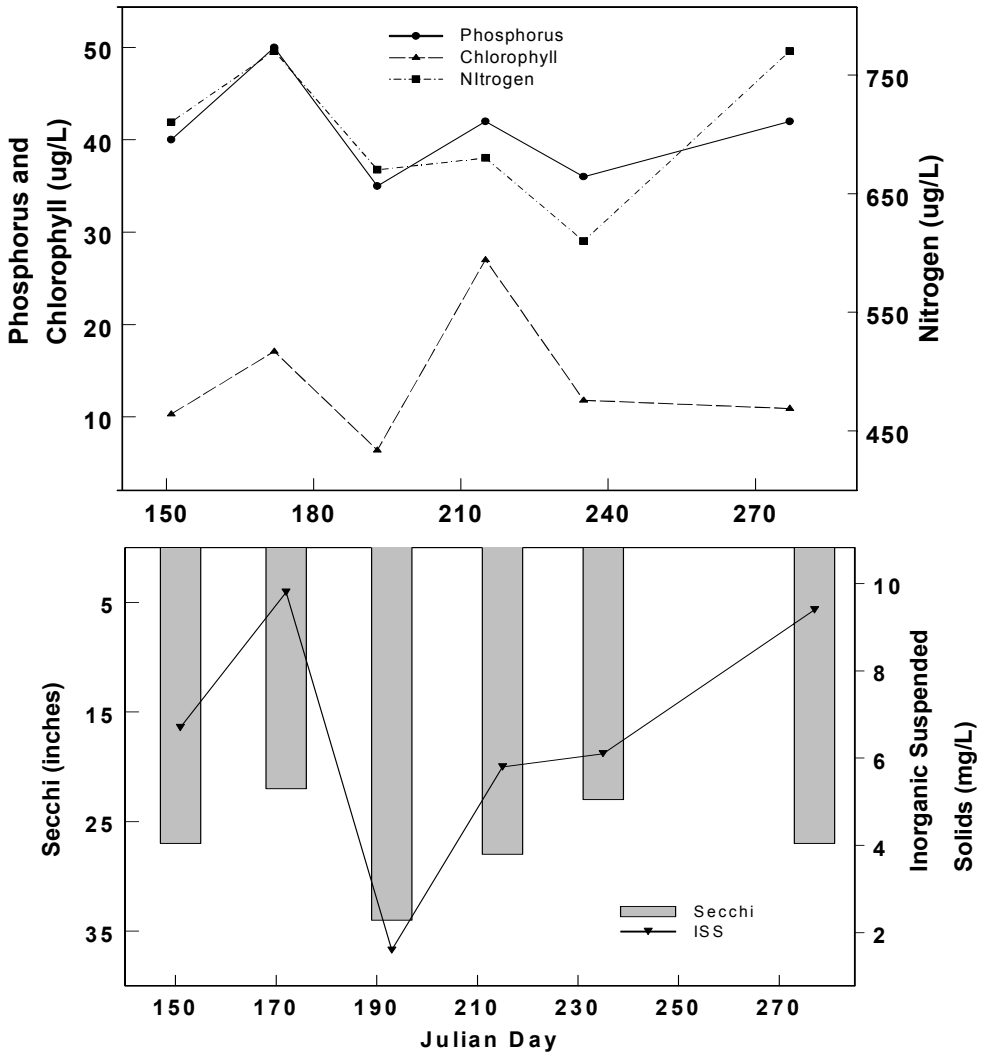

Figure 35. Seasonal fluctuations of parameters for Long Branch Lake - 2000.